

CLAIMS**WHAT IS CLAIMED:**

1. A method for treating a patient having epilepsy which manifests in the form of an intractable focal seizure, said method comprising the steps of:

locating a focal site that is the source of said intractable focal seizure, said focal site being located on a brain's neocortical surface;

establishing direct physical contact between said focal site and a cooling means; and

activating said cooling means and cooling said focal site to abort the intractable focal seizure.

2. A method according to claim 1, where said focal site is determined by a cortical mapping process.

3. A method according to any one of claims 1-2, wherein the mapping process is accomplished by establishing physical contact between a focal site and a cooling means and activating said cooling means to cool said focal site and confirm or eliminate said site as a seizure origin site.

4. A method according to any one of claims 1-3, wherein said activation of the cooling device is manual.

5. A method according to any one of claims 1-4, wherein said cooling means comprises a Peltier chip.

6. A method according to any one of claims 1-5, wherein said focal site is rapidly cooled to a temperature between about 20°C to about 30°C. (see—
Art. 3, Pg. 3, Ln. 10.)

7. A method according to any one of claims 1-6, wherein said focal site temperature is decreased between about 6°C to about 16°C.

8. A method according to any one of claims 1-7, wherein said activating step is performed at a frequency and duration so that said intractable focal seizure is reduced.

9. A method according to any one of claims 1-8, wherein said activation of the cooling device is determined by a seizure detection or anticipation algorithm.

10. A method for treating a patient having epilepsy which manifests in the form of an intractable focal seizure, said method comprising the steps of:

locating a focal site that is the source of said intractable focal seizure, said focal site being located on a brain's neocortical surface;

establishing direct physical contact between said focal site and a cooling means; and

activating said cooling means and cooling said focal site to rapidly abort the intractable focal seizure.

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11. A system for treating a patient having epilepsy which manifests in the form of an intractable focal seizure, wherein a focal site that is the source of said intractable focal seizure has been located, said focal site being located on a brain's neocortical surface, said system comprising:

cooling means;

means for establishing direct physical contact between said focal site and said cooling means; and

means for activating said cooling means and cooling said focal site to abort the intractable focal seizure.

12. The system of claim 11 wherein the cooling means comprises a Peltier chip.

